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**The Obama Effect: Heightened Risk
Tolerance, Optimism, and Wealth
Accumulation by Minorities after 2008**

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Abstract

We study the financial behavior of minorities over 2007-09. We find that after 2008 and compared to whites, African Americans and Hispanics have a higher propensity to increase risk tolerance, optimism, and allocations to risky assets and lower probability of exiting the stock market. These findings cannot be explained by changes in wealth or income, and we ascribe them to the positive effects of President Obama who is a role model for minorities. Specifically, we find that the change in behavior by minorities is consistent with minorities updating their beliefs about future economic outcomes.

JEL Classification: D14, G11, J15

Keywords: Risk tolerance, Optimism, Stock ownership, asset allocation, wealth gap, SCF, presidential elections

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The Obama Effect: Heightened Risk Tolerance, Optimism, and Wealth Accumulation by Minorities after 2008*

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May 16, 2022

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1 Introduction

The wealth gap between minorities and white Americans is an enduring social problem. Moreover, the reluctance of minorities to participate in the stock market has been contributing to widening the racial wealth gap (Wolff 1992; Chiteji and Stafford 1999; Wolff 2017). Surprisingly, little is known as to why minorities do not own equity. For example, the low stock market participation of minorities relative to white Americans cannot be fully explained by differences in income, wealth, and education.

Motivated by the little evidence on why minorities do not take on financial risk, we study the behavior of African Americans and Hispanics over the period after the Great Recession. This is a unique period marked by important economic changes following the collapse of the financial markets. In addition, there were significant political changes with the election of President Obama. The reaction of households to these events can potentially shed light on what drives the heterogeneity in financial decisions across demographic groups.

Given the negative effects of the 2007-08 recession, investors should have reduced exposure to risky assets (Guiso, Sapienza, and Zingales 2018). Instead, we find that after 2008, the likelihood of increasing risk tolerance and optimism is higher for minorities than whites. The propensity to increase allocations to risky assets is also higher for minorities relative to whites.

These findings suggest that some factor, unrelated to the negative effects of the Great Recession, is affecting minorities but not whites. We argue that this factor could be the election of President Obama in 2008. President Obama is a clear role model for minorities (Marx, Ko, and Friedman 2009). Therefore, his political success is a salient event for minorities that could spur more willingness to take on financial risk. This conjecture is motivated by evidence in the existing literature.

First, after the political success of President Obama, minorities might have updated their beliefs and expected economic policies to change in their favor, leading them to invest in risky financial assets (D’Acunto, Ghosh, and Rossi 2021; Engelberg, Guzman, Lu, and Mullins 2021; Dahl, Lu, and Mullins 2021). Similarly, President Obama, being a positive counter-stereotypical exemplar, had an impact on optimism for minorities relative to White Americans.¹ Such increased optimism should have prompted minorities to invest in risky assets (Puri and Robinson 2007).

Second, the election of President Obama may have primed positive identity roles for minorities such as increased competition and confidence (Czopp and Monteith 2006; Rowley, Kurtz-Costes, Mistry, and Feagans 2007). Third, his election increased saliency in diversity, which can enhance trust in economic and financial institutions (D’Acunto, Fuster, and Weber 2021; D’Acunto 2019b). Trust in turn, can encourage exposure to financial risk (Guiso, Sapienza, and Zingales 2004; Guiso, Sapienza, and Zingales 2008). Overall, based on the three aforementioned channels, we posit that minorities should increase their exposure to financial risk in the post-2008 period when compared to white Americans.

We test our hypothesis with the 2007-09 panel of the Survey of Consumer Finances (SCF). We define minorities as African Americans and Hispanic individuals. We use the SCF panel because it is the only panel data set covering U.S. households over the 2007-09 period that includes detailed information on wealth, as well as important variables such as risk tolerance and income risk perceptions. Given the available data, we examine the changes in individuals’ risk tolerance, optimism, stock ownership (i.e. entry and exit from the stock market), and asset allocation decisions after the 2008 election.

¹See Marx, Ko, and Friedman (2009), Aronson, Jannone, McGlone, and Johnson-Campbell (2009), Plant, Devine, Cox, Columb, Miller, Goplen, and Peruche (2009), and Kesler and Churchwell (2020).

We exploit the panel structure of the SCF data to compare the financial decisions pre- and post the 2008 elections across minorities and non-minorities. We implement our approach using cross-sectional probit regressions where the binary dependent variables capture changes in household measures (i.e., increase in risk tolerance and optimism, stock market exit, stock market entry, and increase in equity shares) between the two years in the SCF panel. The main independent variable is a dummy variable for minorities. The regressions include many control variables such as the known determinants of household financial decisions, which include gender, age, college education, home ownership, income, and wealth (Campbell 2006).

The regression results reveal some novel findings. Specifically, we find that the probability of increasing risk tolerance following the 2008 election is higher for minorities relative to whites. Minority individuals are also more likely to increase optimism and their portfolio equity share post-2008 relative to white Americans.

In terms of the decision to own stocks, minorities are less likely to exit the market relative to non-minorities. Furthermore, minorities have a lower probability to enter the market relative to whites. This is not surprising since the Great Recession had an enormous negative effect on wealth and income, which would make entering the stock market very difficult. Interestingly, we find that the entry decisions of African Americans and whites are not statistically different. Given that African Americans have lower participation in the market relative to whites (Wolff 1992; Chiteji and Stafford 1999; Wolff 2017), this statistical similarity between them and whites is in line with a positive effect from the election of President Obama.

An important challenge for our analysis is to identify the channel by which the Obama effect might have operated. As mentioned above, three channels might be affecting the results: updates in beliefs, priming of positive identity roles, and trust in institutions arising from diversity saliency. To test the beliefs channel, we follow

Guiso, Sapienza, and Zingales (2018) and progressively include control variables in our regression specifications that are related to income expectations, background risk factors, change in income perceptions, and emotions. We find evidence for the updated economic beliefs mechanism since the aforementioned control variables reduce the magnitude of the Obama effect for many of our outcome variables.

Unfortunately, the SCF does not include any information that we can use to explicitly account for the identity channel. Similarly, there is no explicit information to measure any changes in trust. To test the trust channel, we take a different approach and use a subsample that includes other minorities. They are Asians, Native Americans, Alaskans, and Pacific Islanders.² For these minority groups, President Obama is not a clear role model and therefore his election should not have impacted their beliefs or prime identity roles. Instead, if they behave like African Americans and Hispanics post 2008, it is probably because their levels of trust increased. We test this conjecture and find that the behavior of Other Minorities is not statistically different than those of white Americans for almost all outcome variables. Thus, the trust in institutions is probably not an important channel via which the Obama effect operates.

Our work contributes to the debate on why minorities do not participate in the stock market (Chiteji and Stafford 1999). Blau and Graham (1990) show that lower stock market participation rates could be an important determinant of the large wealth gap between white individuals and minorities. Similarly, Favilukis (2013) shows that the wealth gap of the last 30 years is caused by limited stock market participation. Kuan, Cullen, and Modrek (2015) find substantial racial differences in retirement saving decisions as well. Using 401(K) data from a large

²Unfortunately, the SCF merges these minorities into one racial category called “Other Minorities.”

national firm, they find that compared to white employees, African American and Hispanic employees participate less in the 401(K) plan, they contribute less when they participate, they draw down more from these accounts during employment, and prefer to invest in safer assets.

Finally, our results are relevant to the gender discrimination literature in economics. [Porter and Serra \(2020\)](#) argue that low representation of women in male dominated fields is related to the lack of female role models. [Bordalo, Coffman, Genaioli, and Shleifer \(2019\)](#) present evidence that beliefs stemming from stereotyping can propagate discrimination and can have a negative impact on the performance of those being discriminated against ([Bohren, Imas, and Rosenberg 2019](#); [Glover, Pallais, and Pariente 2017](#)). For instance, women may underestimate their skills in mathematics and sciences and others may judge them as having low abilities because these fields have stereotypical been dominated by men.³ Compared to these studies, we focus on a period marked by the success of a minority role model that should have helped mitigate the negative effects of discrimination and stereotyping.

The rest of the paper is organized as follows. Section 2 reviews the literature and develops the testable predictions. Section 3 describes the data and key variables. Section 4 reports the results. Section 5 concludes the paper.

2 Hypothesis Development

In this section, we outline our conjectures regarding the Obama effect on financial outcomes, along with the possible channels driving the effect.

³See [Kiefer and Sekaquaptewa \(2007\)](#), [Nosek, Smyth, Sriram, Lindner, Devos, Ayala, Bar-Anan, Bergh, Cai, Gonsalkorale, et al. \(2009\)](#), [Guiso, Monte, Sapienza, and Zingales \(2008\)](#), [Carrell, Page, and West \(2010\)](#), and [Reuben, Sapienza, and Zingales \(2014\)](#)

2.1 President Obama: A Minority Role Model

As the first African-American president, President Obama is undoubtedly an important role model for minorities (Gomstyn 2008). As a role model, he provides role aspirants the opportunity to learn skills and behaviors (Hoyt, Burnette, and Innella 2012; Morgenroth, Ryan, and Peters 2015), as well as influences their beliefs by demonstrating what it is possible (BarNir, Watson, and Hutchins 2011; Hoyt 2013).

Obama's win of the Democratic nomination and later of the presidency provides a clear time-line as to when he became a leading figure for minorities. Therefore, several studies examine the effect of Obama on minorities immediately after the election and the results are mixed. Marx, Ko, and Friedman (2009) document evidence of the Obama effect in closing the racial performance gap on the GRE General Test. On the contrary, Aronson, Jannone, McGlone, and Johnson-Campbell (2009) and Stricker and Rock (2015) find no evidence of any Obama effect on the performance of minorities on standardized tests.

DellaVigna (2010) studies the Obama effect and argues that since Obama is a role model for African Americans, he can change their perception of what they can achieve. For his study, he focuses on several economic outcomes such as crime rates, labor force participation, applications to Law School, contribution to public goods, and time spent in investment activities. Except for Law School applications however, he does not find that the election of President Obama had an immediate impact on economic outcomes.

2.2 Economic Channels

Despite the mixed evidence in the literature, it is possible that overall economic decisions and willingness to take on financial risk might have been affected by the

election of President Obama. For example, [Stout and Le \(2012\)](#) find that after the his election, the optimism of African Americans about the American dream increased despite their deteriorating economic conditions. More importantly, optimism influences decision making. [Puri and Robinson \(2007\)](#) show that optimistic individuals are more willing to take financial risks and tend to allocate more of their wealth to risky assets. [Addoum and Kumar \(2016\)](#) also argue that during a presidential election the supporters of the winning candidate become more optimistic and are willing to invest more in the stock market. These systematic differences in political preferences are strong and lead to substantial differences in the portfolio decisions across investors ([Hong and Kostovetsky 2012](#); [Bonaparte, Kumar, and Page 2017](#)).

2.2.1 Economic Beliefs

In addition to the optimism effect, the existing literature suggests three economic channels via which the Obama effect on financial decisions can operate. The first channel relates to the beliefs about future economic outcomes. Specifically, it is plausible that once minorities have identified with the President, they may have updated their beliefs and expected future economic policies to change in a way that may favor minorities. Such favorable policies could reduce background risks since they can result in better future employment opportunities and increased future income and wealth. [DellaVigna \(2010\)](#) also argues that any effect of Obama's election on economic decisions should operate through changes in beliefs.

Recent studies highlight the importance of the beliefs channel showing that consumers tend to form expectations about future outcomes differently based on whether they perceive top policy makers as being in-group or out-group. For example, [D'Acunto, Ghosh, and Rossi \(2021\)](#) find that the take-up of partial-government guaranteed loans is higher in districts with more support for the ruling party. Fur-

ther, Engelberg, Guzman, Lu, and Mullins (2021) and Dahl, Lu, and Mullins (2021) show that support for political leadership impacts entrepreneurship decisions and economic optimism, respectively. In our case, having expectations of better future economic outcomes predicts that minorities may perceive less background risks and thus become more willing to invest in risky assets.

2.2.2 Identity Roles

The second channel that can prompt changes in the financial decisions of minorities relates to identity. Specifically, the election of President Obama is a salient event that can prime positive stereotypes associated with minority identity groups. For example, in the case of African Americans, the sociology literature finds that positive stereotypes are related to out-performance in competitive activities such as sports, better musical and rhythmic abilities, higher social competence, and in general, encouragement in actions that require taking risks and displaying confidence (Czopp and Monteith 2006). In addition, African Americans are likely to endorse positive identity stereotypes about themselves and not endorse negative group stereotypes (Rowley, Kurtz-Costes, Mistry, and Feagans 2007).

Priming social identity can also affect economic decisions. For example, D'Acunto (2019a) uses gender norms and risky choices and finds that priming people's identity makes them more likely to act in line with the roles of that identity. Therefore, it is possible that the rise of President Obama may have primed positive African American identity traits such as competitiveness, which in turn, could have led to changes in financial risk taking behavior.

2.2.3 Trust

Finally, the third mechanism through which the election of Obama can impact minority financial decisions is trust. Due to the history of discrimination, minorities may not trust institutions created by the white majority. Therefore, President Obama might have increased their trust in these institutions because his election provided a more diverse representation of institutional systems.

Existing studies provide supporting evidence of the trust channel as well. For instance, [D'Acunto, Fuster, and Weber \(2021\)](#) find that more diverse representation in top committees of institutions increases minority engagement with these institutions, driven by an increase in trust. Trust also directly affects financial decisions. [Guiso, Sapienza, and Zingales \(2004\)](#) and [Guiso, Sapienza, and Zingales \(2008\)](#) find that high exposure to financial risk is related to trust and participation in political elections. More recently, [D'Acunto \(2019b\)](#) finds that higher trust in the stock market results in a higher willingness to invest. Thus, through this channel, an increase in minority trust of institutions due to the rise of a minority also predicts higher appetite to take on financial risk.

2.3 Testable Hypothesis

The aforementioned evidence suggests that the election President Obama may affect the financial behavior of minorities. Given the data that we have, we test this conjecture by examining various hypotheses. First, we posit that his election should mitigate some of the heightened risks that minorities perceive. Therefore, they are more likely relative to white Americans to be more risk tolerant after 2008. Relatedly, minorities should be more optimistic after the election.

We also argue that after 2008 minorities should be more willing to take on

financial risk. Specifically, the likelihood that minorities enter (exit) the stock market should be greater (lower) than that of white Americans. Similarly, minority individuals should be more likely to increase their equity shares relative to white Americans. Given that minority stock ownership is historically low ([Wolff 1992](#); [Chiteji and Stafford 1999](#); [Wolff 2017](#)), finding that their propensities to enter or exit the stock market are no different from those of white individuals should also be viewed as an improvement in the risk taking propensity of minorities.

3 Data Sources and Key Variables

In this section, we describe the data and the key variables we use.

3.1 Survey of Consumer Finances

The analysis is based on 2007-09 panel from the Survey of Consumer Finances (SCF). Specifically, in 2009 the Federal Reserve re-interviewed the households that were surveyed in 2007 in an effort to understand the effects of the financial crisis on U.S. households. We use the 2007-09 panel because it allows us to track the behavior of the same individual pre- and post-2008. The year 2008 is important because the rise of President Obama to prominence started with the primaries that took place between January and June of 2008, which led to his election to the office of the President in November of 2008. Among many others, the SCF is also used by [Malmendier and Nagel \(2011\)](#).

3.2 Key Variables

The main independent variable relates to race. Specifically, we create a binary variable that takes a value of 1 if the respondent is a minority (African American or Hispanic), and 0 if the respondent is white. We label this variable *Minority*. We also define the variable *African American*, that takes the value of 1 if the respondent is African American, and 0 if the respondent is white. Finally, we define an other-minority indicator variable that takes the value of 1 if the respondent is Asian, Native American, Alaskan, or Pacific Islander, and 0 if the respondent is white. Unfortunately, the SCF merges this four groups into a single race category.

The SCF reports data related to risk preferences. The respondents are asked to rank their willingness to take on financial risk. We code the value of 1 to reflect unwillingness to take any risks and 4 to reflect a willingness to take substantial risks. Based on their responses, we create a binary variable, *Increase_Risk_Tol*, that takes a value of 1 if the respondent’s willingness to take on financial risk increased by more than 1 over the 2007-09 period, and 0 otherwise.

We also use a question related to economic expectations to measure optimism. The variable *Optimism* takes the value of 1 if the respondent indicates that he expects the U.S. economy to perform “better” over the next five years, compared to the previous five years. *Optimism* takes a value of 0 if the respondent answers the same question with “worse” or “about the same.” Based on the *Optimism* variable, we define *Increase_Optimism* that takes the value of 1 if the *Optimism* variable increased between the two years of the SCF panel, and 0 otherwise.

The SCF reports household stock ownership. We classify a household as a market participant if the household owns stock directly, or indirectly through mutual funds. Based on this classification, we create two binary variables, *Exit* and *Entry*. *Exit*

takes the value of 1 if the respondent was reported as an equity owner in the 2007 survey but not in the 2009 survey, and zero otherwise. *Entry* takes the value of 1 if the respondent was reported as participant in the 2009 survey but not in the 2007 survey, and zero otherwise.

We also measure each household's portion of wealth allocated to risky assets. The equity share is the percentage of wealth invested in publicly traded stocks, including investments in mutual funds. We then define a binary variable *Increase_Risky_Share*, that takes the value of 1 if the respondent's equity share reported in the 2009 survey was larger than the one reported in the 2007 survey, and 0 otherwise.

3.3 Control Variables

Our regression analysis includes various control variables related to factors found to affect decision making during economic downturns. Specifically, [Guiso, Sapienza, and Zingales \(2018\)](#) argue risk taking behavior over a recession is affected by four household-level factors. They are economic conditions, background risks, changes to income perceptions, and emotions.

We control for household economic conditions with income and wealth changes. We capture background risks with a proxy related to changes in income risk, which is based on the self-reported ability of respondents to forecast their income. Other background risk variables are dummy variables related to retirement status, being an entrepreneur, and health insurance status. We proxy for the changes in perceptions of income using the respondents' perception of whether their income level is unusual. We capture the emotional state of respondents with the *Optimism* variable.

Lastly, we use demographic characteristics that have been found to be important determinants of overall portfolio decisions ([Campbell 2006](#)). These include age,

gender, income, wealth, college completion, and home ownership. To better capture the impact of income and wealth on portfolio decision we define high income and high wealth dummy variables, which take the value of 1 if the respondent had higher than average income or wealth in the 2007 survey. For completeness, we provide detailed descriptions of all variables in Appendix A.

3.4 Summary Statistics

Table 1 reports summary statistics for the variables we use in the empirical analysis. The table includes cross-sectional means, standard deviations, and the number of observations. Panel A of Table 1 reports the statistics related to the full SCF sample comprised by minorities and white Americans. Panels B and C provide the summary statistics of the minority and African American subsamples, respectively.

The sample includes around 3,700 observations. Minority and African American individuals comprise 23.1% and 15.2% of the sample, respectively. Males are 72.3% of the sample. About 50% holds a college degree while 21% is retired as of 2007. The average wealth in 2007 is around one hundred and twenty thousand U.S. dollars. Overall, the demographic composition of sample is consistent with the fact that the SCF tends to oversample wealthy individuals.

The univariate statistics show that there are changes in household behavior after 2008. For example, the average increase in risk tolerance is low (0.029). But there is a substantial heterogeneity in risk tolerance changes since its cross-sectional standard deviation is 0.168. When focusing on minorities (African Americans) only, the cross-sectional mean and standard deviation increase to 0.057 (0.050) and 0.233 (0.219), respectively. Overall, these simple univariate statistics are already indicating that white Americans and minorities are different after 2008.

3.5 Graphical Evidence

To visualize the behavioral differences across demographic groups, we plot the cross-sectional averages of the main dependent variables in Figure 1. We present different graphs for each demographic group. Financial decisions vary dramatically across the life-cycle of investors (Fagereng, Gottlieb, and Guiso 2017). Therefore, we plot averages from a matched sample of minorities and white Americans, matched based on their age. The figures also include the 95% confidence intervals of the averages.

The graphs in Figure 1 confirm that there are behavioral differences across whites and minorities. As we see in Figures 1a, 1b, and 1f, minorities are more likely to increase their risk tolerance, optimism, and equity share after the Great Recession. We also find that minorities exit the stock market less than whites (Figure 1c). However, Figure 1d shows that the likelihood of minorities to enter the market is lower than whites. The entry result is not surprising because experiencing a recession typically results in lower equity ownership (Malmendier and Nagel 2011). Moreover, the Great Recession disproportionately hit minorities more than whites (Stout and Le 2012). Therefore, even if minorities are more likely to increase risk tolerance and optimism, they might not have the wealth to invest.

Figure 1e focuses on the entry decision of African Americans. The figure shows that the differences in the entry decision between African Americans and whites are very small. In fact, the multivariate analysis shows that the entry rates between African Americans and whites are not statistically different (see Table 4). This statistically similar behavior between African Americans and whites is consistent with a positive Obama effect among minorities.

4 Empirical Analysis and Results

This section reports the key multivariate regression results.

4.1 Empirical Methodology

We compare the behavior of minorities with that of white individuals before and after the 2008 by estimating the following cross-sectional regressions:

$$Y_i = c + \beta_M \text{Minority}_i + \beta_Z Z_i + \beta_X X_i + \epsilon_i. \quad (1)$$

In the above regression the dependent variable Y_i represents one of five binary variables: *Increase_Risk_Tol*, *Increase_Optimism*, *Exit*, *Entry*, and *Increase_Risky_Share*. The Minority_i variable represents one of three subsamples, Hispanic and African American individuals, African Americans only, or Other minorities only. The coefficient β_M measures the average difference in Y_i between minority and white respondents and we use it to measure the Obama effect on minorities.

In regression (1), Z is a set of baseline demographic control variables that include age, gender, college, high income, high wealth, and home-ownership as of 2007. The vector X includes the additional control variables inspired by [Guiso, Sapienza, and Zingales \(2018\)](#). They are changes in income (ΔIncome), changes in wealth (ΔWealth), changes in income risk ($\Delta\text{Income risk}$), and changes in the perception of income ($\Delta\text{Income Perception}$).⁴ Moreover, we consider optimism as well as dummy variables related to retirement status, health insurance status, and being an entrepreneur. Finally, c is a constant and ϵ_i is the regression error term

In the main regressions analysis, we do not include risk tolerance, change in

⁴Changes in income and wealth have been winsorized at the 1% level in line with previous studies utilizing the SCF data.

risk tolerance and change in optimism as additional control variables. We do so in order to have a clean distinction between the independent and dependent variables. However, in untabulated results we find that the main inferences are not affected if we use them as control variables.

We estimate equation (1) with a probit estimator since the dependent variables are binary. Like [Malmendier and Nagel \(2011\)](#), we report the estimated probit coefficients and z-statistics of the independent variables. We also report the marginal effects related to the β_M to measure the economic significance of the dummy variables related to minorities, African Americans, and other minorities. Following [Malmendier and Nagel \(2011\)](#), we correct all estimated standard errors for the multiple imputation and the sampling variance associated with the SCF data.⁵

4.2 Tests of Economic Channels

Based on the existing literature, we argue that any difference in behavior between minorities and whites captured by β_M might be attributed to three channels: updates in beliefs, priming of positive identity roles, and trust in institutions arising from diversity saliency. To test the beliefs channel, we follow [Guiso, Sapienza, and Zingales \(2018\)](#) and progressively include control variables in our regression specifications that are related to background risk factors (i.e., retirement and health insurance statuses, and being an entrepreneur), change in income risk, changes in income perceptions, and optimism. If the economic belief channel is important, then any estimated differences in behavior between whites and Minorities measured by β_M should decrease in the presence of these control variables.

We cannot follow the same strategy to examine the identity channel because the

⁵The methodology to correct the standard errors is provided by the Federal Reserve Board and it accounts for the imputation uncertainty by bootstrapping standard errors.

SCF does not include any relevant information on identity beliefs. Moreover, there is no explicit information related to changes in trust. To study the trust channel, we take an alternative approach and use a sample of Other Minorities. They include Asians, Native Americans, Alaskans, and Pacific Islanders.⁶ For these minority groups, President Obama is not a clear role model and therefore his election should not have changed their beliefs or primed identity roles. Instead, if they behave similarly to Hispanics and African Americans after 2008, it is probably because their trust has increased. Therefore, if trust is an important mechanism for the Obama effect, when we estimate equation (1) using the sample of Other minorities and white Americans, the estimate of β_M should be in line with that of Hispanics and African Americans, as well as statistically significant.

We acknowledge that like any other study with archival data, our identification strategy is imperfect. In particular, given the data we use, we cannot eliminate the possibility that some unobserved factor is driving the differential behavior between whites and minorities. Nevertheless, our empirical analysis accounts for many alternative channels. Moreover, as we argue later in this section, we provide some evidence that support the economic beliefs mechanism. We also find some evidence against the trust channel. Unfortunately, with our data, we cannot test the priming of positive identity channel and we argue that our results are consistent with that.

4.3 Risk Tolerance

We begin our empirical analysis by comparing the risk tolerance changes of whites and minorities. We report the estimation results from probit regressions in Table 2

⁶The SCF includes Asian American, Native Americans, Alaskans, and Pacific Islanders in the same racial group and we cannot separate them out. These racial groups are different in terms of income, wealth and education. Nevertheless, we examine if their behavior changed post 2008 to get some idea if trust is an important channel for the Obama effect.

where the dependent variable is *Increase_Risk_Tol*. The marginal effects related to the minorities dummy variable (β_M) are reported at the bottom of each specification. Columns (1) to (3) report the results for the sample that includes Hispanic and African American individuals, Column (4) examines African Americans only.

The results in Column (1), which include the baseline controls as well as the changes in income and wealth, suggest that after 2008 minorities are more likely to increase their risk tolerance relative to white Americans. In particular, the marginal effects at the bottom of the table indicate that compared to white Americans, minorities have a 3.07% higher probability of increasing risk tolerance after 2008.

We also find significant differences between minorities and whites when we include additional controls. For instance, the specification in Column (2), which accounts for various background risks, implies that compared to white Americans, minorities have a 2.55% higher probability of increasing risk tolerance after 2008. This economic effect is meaningful and is larger than the marginal effects of Δ Income and Δ Wealth. Specifically, in unreported results we find that the marginal effects of a 1% increase in Δ Income and Δ Wealth on the probability of increasing risk tolerance are 0.67% and -0.21%, respectively.

In Column (3), we present results that include the full set of control variables. Even in this strictest specification, we find that the probability of a minority increasing risk tolerance is 2.25% higher than that of a white Americans. Next, Column (4) repeats the analysis in Column (3) for a sample restricted to African and white Americans only. As in the previous specifications, African Americans on average have a 1.96% higher probability of increasing risk tolerance over the 2007-09 period, relative to their white peers.

We test for the strength of the economic beliefs channel by progressively adding control variables in regressions (1) to (3), that are related to changes in beliefs, to

examine how the economic significance of β_M changes. In support of the economic beliefs channel, we find that the marginal effects decrease as we move from Column (1) to Column (3). However, even in the presence of all the control variables in Column (3), the marginal effect for the difference between whites and minorities remains positive and significant, suggesting that the trust and social identity channels may also be important.

4.4 Optimism

Next, we examine the propensity to increase optimism after 2008. Optimism and beliefs about the future are conceptually related. Therefore, documenting any changes in optimism after 2008 can provide additional evidence in favor of the beliefs channel. The results for optimism are presented in Table 3. The dependent variable in the probit regressions is the increase in optimism dummy variable (*Increase.Optimism*). Similar to the analysis in Table 2, we estimate specifications where we progressively expand the set of control variables.

Columns (1) through (3) of Table 3 compare the increase in optimism of Hispanics and African Americans to that of white Americans. Column (4) focuses on African Americans only. In the strictest of the specifications, we find that a minority (African American) is 3.81% (4.11%) more likely to increase optimism during the 2007-09 period, relative to white Americans. To get a sense of the economic significance, we compare the marginal effects of the minority variable to those of other controls. A 1% increase in ΔIncome and ΔWealth impacts the likelihood of an increase in optimism by 6.13% and -0.21%, respectively. We can see that while the marginal effect of income is larger than that of the minority variable, it is not statistically significant.

4.5 Entry and Exit from the Stock Market

Next, we examine differences in the decision to enter and exit the stock market between whites and minorities. Panels A and B of Table 4 display the results related to the exit and entry probit regressions, respectively. The specifications in both panels follow the same structure as Tables 2 and 3.⁷

As reported in Panel A, minorities are less likely to exit the market than whites. For example, the estimates in Column (1) suggest that the probability for a minority exiting the stock market is 4.55% lower than that of whites. In columns (2) and (3), we progressively include the control variables related to the economic beliefs channel. In the presence of these variables, the marginal effects of the minority dummy variable decrease suggesting that our findings are consistent with the economic beliefs channel.

The results in Panel B show that minorities are less likely to enter the market. For example, Column (3) reports that the probability of minorities to enter the stock market is 2.96% lower than that of white Americans in the post-2008 period. Column (4) indicates that this probability is 1.92% lower for African Americans but this marginal effect is not statistically significant at the 5% level. Finally, with the entry results we cannot draw any conclusions regarding the importance of the beliefs channel since the magnitude and statistical significance of the marginal effects does not change much from columns (1) to (3).

The relatively weak results from the entry regressions are not surprising because during recessions investors usually become more risk averse and tend to exit from the stock market (Guiso, Sapienza, and Zingales 2018). Also, experiencing a re-

⁷In untabulated results, we also include risk tolerance, change in risk tolerance, and change in optimism as control variables and find that the results are not materially different from those reported in Table 4.

cession typically results in lower equity ownership (Malmendier and Nagel 2011). Furthermore, the Great Recession disproportionately affected the wealth of minorities more than the wealth of whites (Stout and Le 2012) and typically decreases in liquid wealth lead to lower stock ownership (Brunnermeier and Nagel 2008). It is therefore possible that minorities might have wanted to invest in risky assets but they did not have sufficient wealth to do so.

Nevertheless, we do find that the stock-market entry behavior of African Americans is not statistically different than that of whites over the two years of the SCF panel. This is a surprising result because typically African Americans are relatively more reluctant to own equity than whites (Wolff 1992; Chiteji and Stafford 1999; Wolff 2017). This statistically similar behavior between these two racial groups is consistent with the Obama effect.

4.6 Asset Allocation

We also examine if post-2008, minorities invest a larger proportion of wealth in risky assets. As before, we estimate specifications using a probit regression, progressively adding the control variables to the estimation.⁸ The dependent variable is the binary *Increase_Risky_Share*. We report the results in Table 5.

The estimation results strongly support that post 2008, minorities are more likely to increase investment in risky assets. Specifically, in the strictest specifications, the marginal effects imply that minorities (African Americas) have a 12.23% (10.19%) higher probability to increase their equity shares after the 2008 election. These marginal effects are statistically and economically significant when compared to the

⁸In untabulated results we include risk tolerance, change in risk tolerance, and change in optimism as control variables. We find that the results are not materially changed with the inclusion of these three control variables.

impact ΔIncome and ΔWealth . A 1% increase in ΔIncome reduces the propensity of increasing the equity share by 7.86%, while the same change for ΔWealth increases the likelihood of increasing equity share by 0.24%.

The results related to asset allocation are consistent with the previous findings on risk tolerance and optimism. We find that post 2008, minorities are more likely to be more risk tolerant and more optimistic. Therefore, as suggested by prior work (Puri and Robinson 2007; Malmendier and Nagel 2011), minorities should allocate more of their wealth to risky assets. We find they are more likely to do so despite being in the aftermath of the Great Recession.

The marginal effects of β_M also decrease as we include the economic-beliefs proxies in columns (2), (3), and (4). This finding suggests that the Obama effect on the asset allocation decision is partly driven by changes to economic beliefs. Nevertheless, since the marginal effects remains positive and significant in regressions (3) and (4), trust and positive identity roles might also be important channels.

4.7 Validation Test: Trading Frequency

To bolster our empirical analysis we perform a validation test. Specifically, we perform a case study related to the trading frequency of the households in our sample. Trading frequency is important because it is considered a measure of overconfidence (Varian et al. 1989; Harris and Raviv 1993; Odean 1998; Gervais and Odean 2001; Barber and Odean 2001). Given that optimism can spur overconfidence (Puri and Robinson 2007), we expect that post 2008, minorities would trade more than whites.

We extract the trading frequency information from a question addressed to respondents with brokerage accounts. The question reads “Over the past year, about how many times did you buy or sell stocks or other securities through a broker?”

Based on the responses, we create a variable, $\Delta Number_of_Trades$, which is the change to the number of trading instances between the two years of the SCF panel. As reported in Table 1, the trading frequency variable is available for 588 respondent and only 10 (6) minority (African American) individuals. Given the small sample size, we cannot draw conclusive evidence on trading frequency differences between minorities and whites. Therefore, we offer this analysis as a validation test of our main findings.

In this regard, we repeat the analysis with Regression (1), using the variable related to the change in trades as the dependent variable. Because $\Delta Number_of_Trades$ is a continuous variable, we use OLS to estimate the regression. We report the results of the multivariate regressions in Table 6. Columns (1) to (3) display the results with the sample of minorities that includes Hispanics and African Americans, while Column (4) focuses on African Americans. As we see in Columns (1) to (4), we find that minorities on average trade more than whites. This implies that overconfidence among minorities is higher compared to white Americans after the election of President Obama during the 2008 financial crisis.

4.8 Other Minorities and the Role of Trust

In this final section, we attempt to directly test for the role of trust on the Obama effect. As suggested by existing studies, diversity can foster trust among minority groups (D’Acunto, Fuster, and Weber 2021). More importantly, trust can lead to higher willingness to invest in risky assets (Guiso, Sapienza, and Zingales 2008; D’Acunto, Ghosh, Jain, and Rossi 2021).

For this analysis, we use a subsample of minorities that includes Asians, Native

Americans, Alaskans, and Pacific Islanders.⁹ We conjecture that for this group of Other minorities Obama is not a clear role model. Therefore, any changes in their behavior during the risk of President Obama are less likely due to the economic beliefs and positive identity priming channels. In contrast, being minorities themselves, they should value diversity and if they behave similarly to African Americans and Hispanics after the election, it could be because their trust has increased.

To test this conjecture, we repeat all our previous tests restricting the sample to Other minorities and white Americans. We start with the increase in risk tolerance shown in Column (5) of Table 2. The positive marginal effect shows that Other minorities are likely to increase risk tolerance relative to whites, however, this difference is not statistically different from zero. Next, we repeat the analysis using the increase in optimism variable. In Column (5) of Table 3, we find that while Other minorities' optimism is more likely to decrease relative to white Americans, the effect is not statistically significant at the 10% level.

The stock-market participation decisions of Other minorities is reported in Columns (5) of Panels A and B in Table 4. We find that Other minorities are 2.31% more likely to exit the stock market compared to white Americans, but this effect is not statistically significant. They are also 5.72% less likely to enter the stock market relative to white Americans. This effect is only significant at the 10% level.

In terms of the allocation to risky assets, in Column (5) of Table 5 we find that Other minorities are 9.16% more likely to increase the risky share of their portfolio relative to white Americans. This effect though is the smallest and least significant of all the marginal effects related to asset allocation. Finally, in Column (5) of Table

⁹Ideally, we would like to focus only on Asian Americans since their levels of income, wealth, education, and stock ownership are similar to whites. Unfortunately, the SCF does not separate Asian Americans and includes them in the same race category as Native Americans, Alaskans, and Pacific Islanders.

6, we find that Other minorities on average trade less than white Americans. This effect is opposite to that found for Hispanics and African American minorities.

To sum, the balance of the evidence suggests that on average there are no strong differences in the behavior of Other minorities relative to whites. We interpret these findings with caution since the sample of Other minorities is relatively small and it groups minorities that are substantially different in term of income, wealth, and asset ownership. Nevertheless, the results provide some evidence that trust levels of minorities seems to have remained relatively unchanged after 2008.

5 Conclusion

The reluctance of minorities to own equity contributes to the widening wealth gap between them and white Americans. Surprisingly, their unwillingness to take financial risk cannot be explained by differences in income, wealth, and education. To uncover what other factors might be responsible for minorities not investing in risky assets, we examine their behavior over a period marked by the rise of President Obama. We find relative to whites, minorities have a higher probability of increasing financial risk tolerance, of being more optimistic and investing more in risky assets. Furthermore, we find that minorities exit the stock market less. Also, African Americans in particular are more likely to enter the stock market at the same rate as white Americans. For a small sample of minorities, we find that they trade more often than whites.

These results suggest that despite the negative effects of the Great Recession, some other positive event or factor has encouraged minorities to take financial risk. We conjecture that this event is the election of President Obama, who is a clear role model for minorities. We find support for improved beliefs of future economic

outcomes as the channel through which the Obama effect impacts outcomes. We also have some evidence that trust might not be driving the Obama effect. Our results are also consistent with the priming of role models channel, albeit we cannot test this channel. Overall, our findings suggest that social experiences such as the success of a role model are important for financial decisions. Therefore, the lack of many visible minority role models in the political and corporate world might be a reason why minorities underinvest in risky assets.

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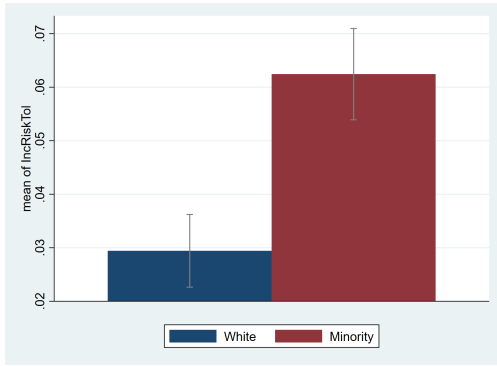
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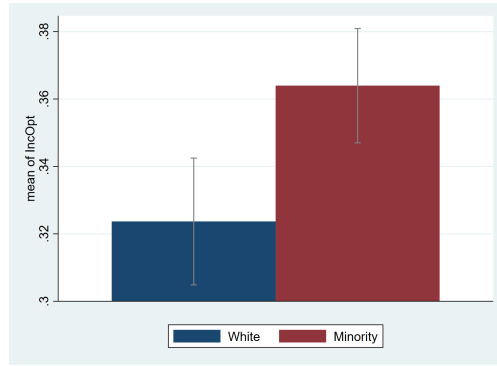
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Figure 1: Changes in Preferences and Financial Decisions Per Race

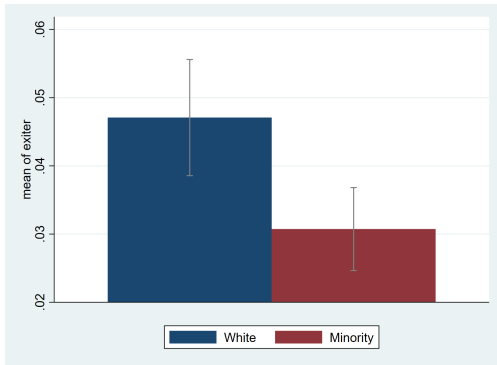
The figures present statistics based on age matched samples of minorities and white Americans from the SCF 2007-09 panel. Each figure presents the cross-sectional average by race. The figures include error bars for the 95% confidence interval. Detailed variable descriptions are included in Appendix A.



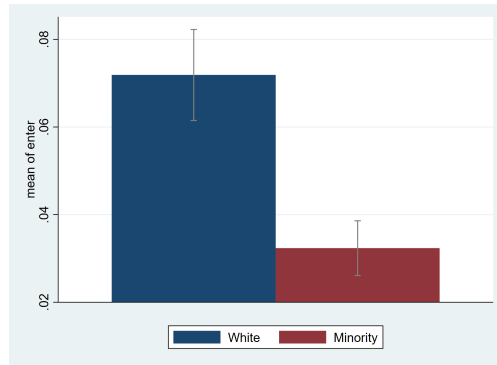
(a) Average Increase in Risk Tolerance



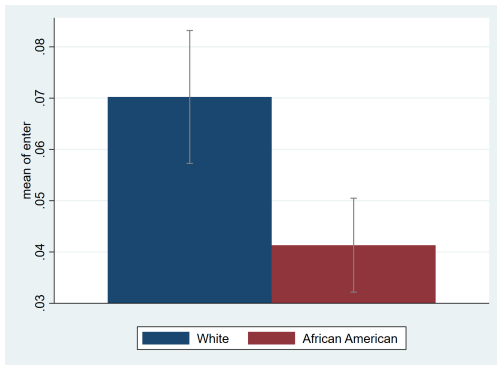
(b) Average Increase in Optimism



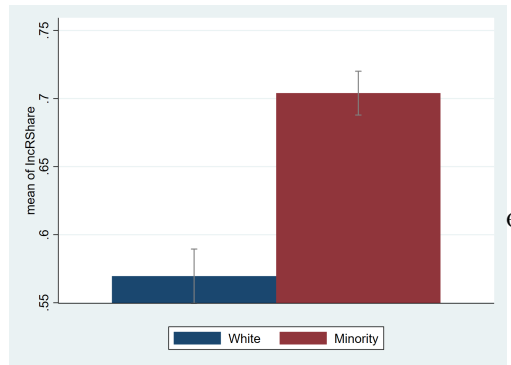
(c) Average Exit



(d) Average Entry



(e) Average Entry of African Americans



(f) Average Increase in Equity Share

Table 1: Summary Statistics - Full Sample and Subsamples

This table reports summary statistics of the main variables from the 2007-09 SCF panel. Panels A, B, C report summary statistics for the full sample and subsamples by race, respectively. Detailed variable descriptions are included in Appendix A.

Variable	Panel A Full Sample			Panel B Minorities			Panel C African Americans		
	Avg	StDev	N	Avg	StDev	N	Avg	StDev	N
Minority	0.23	0.42	3,700						
African American	0.15	0.36	3,445						
Increase in Risk Tolerance	0.03	0.17	3,700	0.06	0.23	618	0.05	0.22	363
Exit	0.05	0.23	3,700	0.03	0.16	618	0.03	0.17	363
Entry	0.06	0.23	3,700	0.03	0.17	618	0.04	0.20	363
Increase in Risky share	0.54	0.50	3,700	0.72	0.45	618	0.68	0.47	363
Increase in Optimism	0.35	0.48	3,700	0.37	0.48	618	0.40	0.49	363
Δ Number of Trades	(5)	65	588	12	14	10	17	14	6
Male	0.72	0.45	3,700	0.63	0.48	618	0.52	0.50	363
Age	50	17	3,700	44	15	618	46	16	363
Wealth in 2007 (in mil.)	0.12	1.12	3,700	0.01	0.12	618	0.01	0.11	363
High Wealth	0.33	0.47	3,700	0.12	0.32	618	0.13	0.34	363
Income in 2007 (in mil.)	0.06	0.1	3,700	0.04	0.05	618	0.04	0.05	363
High Income	0.40	0.49	3,700	0.30	0.46	618	0.27	0.45	363
College	0.48	0.50	3,700	0.36	0.48	618	0.43	0.50	363
Homeowner	0.65	0.48	3,700	0.45	0.50	618	0.44	0.50	363
Δ Income	0.00	0.07	3,700	0.00	0.03	618	0.00	0.04	363
Δ Wealth	(0.02)	0.76	3,700	(0.001)	0.09	618	(0.004)	0.09	363
Retired 2007	0.21	0.41	3,700	0.12	0.33	618	0.14	0.35	363
Δ Income risk	0.05	0.58	3,700	0.03	0.62	618	0.01	0.62	363
Δ Income Perception	0.06	0.56	3,700	0.12	0.58	618	0.11	0.59	363
Optimism	0.30	0.46	3,700	0.40	0.49	618	0.40	0.49	363
Health Insurance	0.92	0.27	3,700	0.86	0.34	618	0.91	0.30	363
Entrepreneur	0.14	0.35	3,700	0.07	0.25	618	0.06	0.24	363

Table 2: Increase in Risk Tolerance by Race

This table reports probit regression estimates. The dependent variable is the increase in risk tolerance over the 2007-09 period. The sample in Columns (1) to (3) includes all minorities. The sample in column (4) excludes Hispanics and only includes African Americans. The sample in column (5) only includes Other Minorities. We report, beneath the estimates, z -statistics based on standard errors corrected for multiple imputation and sampling variance associated with the SCF. We report the marginal effects of the minority, African American, and Other Minorities dummy variables. We do not report the estimate of the constant regression term and the estimates related to the baseline controls. The baseline controls are age, age squared, and dummy variables related to gender, college education, homeownership, high income (above the sample average), and high wealth (above the sample average). Detailed variable descriptions are included in Appendix A.

Increase in Risk Tolerance	(1)	(2)	(3)	(4)	(5)
Minority	0.399	0.387	0.355		
	(4.550)	(4.470)	(4.080)		
African American				0.348	
				(2.810)	
Other Minority					0.265
					(1.140)
Δ Income	0.063	0.044	0.104	0.021	0.178
	(0.150)	(0.090)	(0.220)	(0.040)	(0.340)
Δ Wealth	-0.030	-0.033	-0.034	-0.033	-0.027
	(-1.380)	(-1.460)	(-1.540)	(-1.570)	(-1.070)
Retired		0.048	0.060	-0.018	-0.214
		(0.260)	(0.320)	(-0.100)	(-0.970)
Δ Income risk		0.009	-0.008	0.074	0.027
		(0.170)	(-0.140)	(1.200)	(0.390)
Health insurance		-0.188	-0.178	-0.265	-0.215
		(-1.290)	(-1.230)	(-1.400)	(-1.030)
Entrepreneur		-0.245	-0.256	-0.327	-0.244
		(-1.680)	(-1.740)	(-1.830)	(-1.430)
Δ Income perception			0.133	0.067	0.015
			(1.570)	(0.750)	(0.140)
Optimism			0.098	0.031	-0.087
			(1.400)	(0.340)	(-0.750)
Observations	3,700	3,700	3,700	3,445	3,239
Baseline Controls	YES	YES	YES	YES	YES
Pseudo R^2	4.5%	5.1%	5.7%	4.3%	3.0%
Marginal Effects					
dy/dx	3.07%	2.55%	2.25%	1.96%	1.33%
z-stat	(5.425)	(4.318)	(3.993)	(2.715)	(1.143)

Table 3: Increase in Optimism by Race

This table reports probit regression estimates. The dependent variable is the increase in optimism over the 2007-09 period. The sample in Columns (1) to (3) includes all minorities. The sample in column (4) excludes Hispanics and only includes African Americans. The sample in column (5) only includes Other Minorities. We report, beneath the estimates, z -statistics based on standard errors corrected for multiple imputation and sampling variance associated with the SCF. We report the marginal effects of the minority, African American, and Other Minorities dummy variables. We do not report the estimate of the constant regression term and the estimates related to the baseline controls. The baseline controls are age, age squared, and dummy variables related to gender, college education, homeownership, high income (above the sample average), and high wealth (above the sample average). Detailed variable descriptions are included in Appendix A.

Increase in Optimism	(1)	(2)	(3)	(4)	(5)
Minority	0.108	0.108	0.108		
	(2.430)	(2.450)	(2.480)		
African American				0.180	
				(3.370)	
Other Minority					-0.171
					(-1.870)
Δ Income	0.178	0.166	0.166	0.205	0.318
	(0.750)	(0.700)	(0.710)	(0.870)	(1.280)
Δ Wealth	-0.005	-0.006	-0.006	-0.005	-0.004
	(-0.490)	(-0.560)	(-0.560)	(-0.500)	(-0.350)
Retired		0.068	0.068	0.107	0.128
		(0.850)	(0.860)	(1.320)	(1.530)
Δ Income risk		0.003	0.003	-0.017	-0.014
		(0.090)	(0.070)	(-0.430)	(-0.370)
Health insurance		0.086	0.086	0.125	0.286
		(0.980)	(0.980)	(1.420)	(2.920)
Entrepreneur		-0.075	-0.075	-0.073	-0.026
		(-1.170)	(-1.170)	(-1.120)	(-0.380)
Δ Income perception			0.005	-0.004	0.000
			(0.120)	(-0.090)	(0.000)
Observations	3,700	3,700	3,700	3,445	3,239
Baseline Controls	YES	YES	YES	YES	YES
Pseudo R^2	0.3%	0.4%	0.4%	0.6%	0.6%
Marginal Effects					
dy/dx	2.77%	3.71%	3.81%	4.11%	-6.21%
z -stat	(1.807)	(2.325)	(2.355)	(2.483)	(-1.878)

Table 4: Stock Market Exit and Entry by Race

This table reports probit regression estimates. The dependent variable in Panel A (B) is the stock market exit (entry) over the 2007-09 period. The sample in Columns (1) to (3) includes all minorities in both panels. The sample in columns (4) only includes African Americans, and the sample in columns (5) only includes Other Minorities in both panels. We report, beneath the estimates, z -statistics based on standard errors corrected for multiple imputation and sampling variance associated with the SCF. We do not report the estimate of the constant term and the estimates related to the baseline controls. The baseline controls are age, age squared, and dummy variables related to gender, college education, homeownership, high income (above the sample average), and high wealth (above the sample average). Detailed variable descriptions are included in Appendix A.

	Panel A: Exit				
	(1)	(2)	(3)	(4)	(5)
Minority	-0.193	-0.185	-0.203		
	(-1.790)	(-1.720)	(-1.920)		
African American				-0.170	
				(-1.350)	
Other Minority					0.195
					(1.590)
Δ Income	0.007	0.024	0.030	0.034	0.006
	(0.030)	(0.110)	(0.130)	(0.140)	(0.020)
Δ Wealth	-0.031	-0.031	-0.030	-0.031	-0.037
	(-2.490)	(-2.410)	(-2.420)	(-2.450)	(-2.890)
Retired		-0.019	-0.013	0.014	0.036
		(-0.110)	(-0.080)	(0.080)	(0.220)
Δ Income risk		0.008	0.016	-0.012	-0.015
		(0.120)	(0.240)	(-0.170)	(-0.210)
Health insurance		0.165	0.144	0.102	0.075
		(0.950)	(0.820)	(0.580)	(0.410)
Entrepreneur		0.105	0.112	0.116	0.178
		(1.560)	(1.640)	(1.630)	(2.480)
Δ Income perception			-0.105	-0.121	-0.079
			(-2.100)	(-2.230)	(-1.370)
Optimism			0.150	0.148	0.075
			(2.020)	(1.970)	(1.060)
Observations	3,700	3,700	3,700	3,445	3,239
Baseline Controls	YES	YES	YES	YES	YES
Pseudo R^2	9.4%	9.6%	9.9%	9.0%	7.8%
Marginal Effects					
dy/dx	-4.55%	-1.96%	-2.05%	-1.82%	2.31%
z-stat	(-4.763)	(-1.840)	(-1.988)	(-1.370)	(1.618)

Table 4: Stock Market Exit and Entry by Race ... Continued

	Panel B: Enter				
	(1)	(2)	(3)	(4)	(5)
Minority	-0.259	-0.258	-0.265		
	(-2.090)	(-2.080)	(-2.070)		
African American				-0.162	
				(-1.140)	
Other Minority					-0.468
					(-1.930)
Δ Income	-0.484	-0.494	-0.499	-0.527	-0.517
	(-2.360)	(-2.380)	(-2.380)	(-2.580)	(-2.410)
Δ Wealth	0.043	0.043	0.043	0.044	0.045
	(2.050)	(2.020)	(2.020)	(2.040)	(2.110)
Retired		-0.084	-0.086	-0.072	-0.037
		(-0.790)	(-0.800)	(-0.660)	(-0.330)
Δ Income risk		-0.016	-0.013	0.008	-0.111
		(-0.310)	(-0.250)	(0.150)	(-2.090)
Health insurance		0.029	0.029	-0.009	-0.081
		(0.230)	(0.220)	(-0.070)	(-0.540)
Entrepreneur		0.016	0.019	-0.002	-0.030
		(0.200)	(0.240)	(-0.020)	(-0.380)
Δ Income perception			-0.025	-0.003	0.004
			(-0.490)	(-0.060)	(0.080)
Optimism			0.075	0.048	0.096
			(1.030)	(0.630)	(1.230)
Observations	3,700	3,700	3,700	3,445	3,239
Baseline Controls	YES	YES	YES	YES	YES
Pseudo R^2	4.3%	4.4%	4.4%	3.7%	3.6%
Marginal Effects					
dy/dx	-2.89%	-2.96%	-2.96%	-1.92%	-5.72%
z-stat	(-2.293)	(-2.289)	(-2.289)	(-1.239)	(-1.987)

Table 5: Increase in Portfolio Allocation to Risky Share by Race

The table reports probit regression estimates. The dependent variable is the increase in the equity share over the 2007-09 period. The sample in Columns (1) to (3) includes all minorities. The sample in column (4) excludes Hispanics and only includes African Americans. The sample in column (5) only includes Other Minorities. We report, beneath the estimates, z -statistics based on standard errors corrected for multiple imputation and sampling variance associated with the SCF. We report the marginal effects of the minority, African American, and Other Minorities dummy variables. We do not report the estimate of the constant regression term and the estimates related to the baseline controls. The baseline controls are age, age squared, and dummy variables related to gender, college education, homeownership, high income (above the sample average), and high wealth (above the sample average). Detailed variable descriptions are included in Appendix A.

Increase in Risky Share	(1)	(2)	(3)	(4)	(5)
Minority	0.357	0.354	0.350		
	(8.210)	(7.820)	(7.440)		
African American				0.285	
				(5.620)	
Other Minority					0.250
					(2.770)
Δ Income	-0.227	-0.227	-0.225	-0.209	0.1886906
	(-0.930)	(-0.910)	(-0.900)	(-0.820)	(-0.730)
Δ Wealth	0.005	0.007	0.007	0.007	0.0087984
	(0.400)	(0.510)	(0.520)	(0.510)	(0.680)
Retired		-0.230	-0.230	-0.207	0.2494619
		(-3.120)	(-3.110)	(-2.780)	(-3.100)
Δ Income risk		-0.016	-0.015	0.005	0.0224845
		(-0.540)	(-0.490)	(0.150)	(-0.550)
Health insurance		-0.398	-0.398	-0.401	0.2875951
		(-5.300)	(-5.250)	(-5.120)	(-3.660)
Entrepreneur		0.017	0.018	0.052	0.0457478
		(0.290)	(0.320)	(0.920)	(0.750)
Δ Income perception			-0.016	-0.036	0.0611612
			(-0.400)	(-0.910)	(-1.540)
Optimism			0.045	0.039	0.0606348
			(0.930)	(0.760)	(1.250)
Observations	3,700	3,700	3,700	3,445	3,239
Baseline Controls	YES	YES	YES	YES	YES
Pseudo R^2	10.6%	11.2%	11.2%	9.6%	7.8%
Marginal Effects					
dy/d(minority)	23.12%	12.60%	12.23%	10.19%	9.16%
z -stat	(16.016)	(8.103)	(7.370)	(5.675)	(2.796)

Table 6: Change in Number of Trades by Race

The table reports OLS regression estimates. The dependent variable is the Δ Number of Trades over the 2007-09 period. The sample in Columns (1) to (3) includes all minorities. The sample in column (4) excludes Hispanics and only includes African Americans. The sample in column (5) only includes Other Minorities. Beneath the estimates, we report t -statistics based on standard errors corrected for multiple imputation and sampling variance associated with the SCF observations. We do not report the estimate of the constant regression term and the estimates related to the baseline controls (i.e., age, age squared, dummy variables related to gender, college education, homeownership, high income (above the sample average), and high wealth (above the sample average)). Detailed variable descriptions are in Appendix A.

Δ Number of Trades	(1)	(2)	(3)	(4)	(5)
Minority	16.230	15.279	15.295		
	(1.960)	(1.970)	(2.050)		
African American				20.615	
				(2.080)	
Other Minority					-6.002
					(-0.830)
Δ Income	5.328	5.356	6.475	6.318	6.775622
	(0.280)	(0.270)	(0.330)	(0.320)	(0.340)
Δ Wealth	0.142	0.122	0.126	0.121	0.1154037
	(0.150)	(0.130)	(0.130)	(0.120)	(0.130)
Retired		8.558	9.048	8.666	6.511737
		(0.550)	(0.580)	(0.550)	(0.440)
Δ Income risk		6.545	6.816	6.836	6.540055
		(1.170)	(1.170)	(1.170)	(1.140)
Health insurance		2.198	-7.896	-7.854	-7.054548
		(0.060)	(-0.430)	(-0.430)	(-0.410)
Entrepreneur		-4.886	-4.957	-5.122	-5.332072
		(-0.490)	(-0.520)	(-0.530)	(-0.560)
Δ Income perception			-3.938	-3.933	-3.367452
			(-0.450)	(-0.450)	(-0.430)
Optimism			-2.773	-3.105	-4.510832
			(-0.340)	(-0.380)	(-0.620)
Observations	588	588	588	584	602
Baseline Controls	YES	YES	YES	YES	YES
Adj R^2	3.5%	3.6%	3.4%	3.5%	2.9%

Appendix A: Variable Definitions

Variable	Definition
Minority	Indicator variable that takes the value of 1 if respondent is Hispanic or African American and takes the value of 0 if respondent is white.
African American	Indicator Variable that takes the value of 1 if respondent is African American and 0 if respondent is white
Other Minority	Indicator Variable takes the value of 1 if respondent is Asian, Native American, Alaskan, or Pacific Islander and zero if respondent is white
Risk tolerance	Variable that takes the value of 1 if respondent is unwilling to take any risk, 2 willing to take average risk, 3 willing to take above average risk, and 4 willing to take substantial risk.
Increase in Risk Tolerance	Indicator variable that takes the value of 1 if risk tolerance increased by more than 1 between the two years reported in the 2007-09 SCF panel, and 0 otherwise.
Equity share	Percentage of financial wealth invested in publicly traded stocks, including investments in mutual funds and excluding retirement accounts.
Increase in Equity share	Indicator variable that takes the value of 1 if the respondent's equity share increased between the two years reported in the 2007-09 SCF panel, and 0 otherwise.
Participation	Indicator variable that takes the value of 1 if respondent has a positive equity share, and 0 otherwise.
Entry (Ext)	Indicator variable that takes the value of 1 if participation is reported to be 1 (0) in the 2007 survey and reported 0 in the 2009 survey, and zero otherwise.
Optimism	Indicator variable that takes value of 1 if respondent expects the U.S. economy to perform better over next five years, and 0 otherwise
Increase in Optimism	Indicator variable that takes the value of 1 if optimism increased between the two years reported in the 2007-09 SCF panel, and 0 otherwise.
Δ Number of Trades	The change in the respondent's frequency of trading between the two years reported in the 2007-09 SCF panel.
Male	Indicator variables that takes the value of 1 if respondent is a male, and 0 otherwise.
Age	Age of respondent in number of years as of 2007.
Age ²	The square of the respondent's de-measured age in 2007 divided by 100.
Income	Total dollar amount from wages, salaries, or sole proprietorships for 2006 (2008) as reported in the 2007 (2009) interviews of the 2007-09 SCF panel.
Wealth	Financial wealth is the dollar amounts in CDs, savings, and money market accounts mutual funds, bonds, stocks, and annuities as reported in the 2007 (2009) interviews of the 2007-09 SCF panel.
High Wealth	Indicator variable that takes the value of one if respondent's wealth is above the sample cross-sectional mean of wealth in the 2007 panel, and 0 otherwise.
High Income	Indicator variable that takes the value of one if respondent's income is above the sample cross-sectional mean of income in the 2007 panel, and 0 otherwise.
College	Indicator variable that takes value of 1 if respondent has completed university by the end of 2007, and takes the value of 0 otherwise.
Homeowner	Indicator variable that takes the value of 1 if respondent owns a residence in 2007, and 0 otherwise.
Δ Income	Change in income between the two years reported in the 2007-09 SCF panel, winsorized at the 1% level.
Δ Wealth	Change in financial wealth between the two years reported in the 2007-09 SCF panel, winsorized at the 1% level.
Retired	Indicator variable that takes the value of 1 if respondent is a worker and retired, or retired and disabled, retired and unemployed, and 0 otherwise.
Income risk	Indicator variable that takes the value of 1 if respondent does not have a good idea of income over the next year, and zero otherwise.
Δ Income risk	Variable taking the value of -1 if income risk decreased, 0 if unchanged, and 1 if it increased between the two years reported in the SCF 2007-09 panel.
Income Perception	Indicator variable taking the value of 1 if the respondent says the change in his/her income is unusual in a year, and zero otherwise.
Δ Income Perception	Variable taking the value of -1 if the income perception decreased, 0 if unchanged, and 1 if it increased between the two years reported in the 2007-09 SCF panel.
Health Insurance	Indicator variable takes the value of one if respondent is covered by any type of public or private health insurance, and take the value of zero otherwise
Entrepreneur	Indicator variable takes the value of one if respondent owns a privately-held business and take the value of zero otherwise